

PIKES PEAK RADIO AMATEUR ASSOCIATION (PPRAA)

Activities/Meetings

- Ham Breakfast
- PPRAA Board Mtg
Mon,
Daniel's Taco
- PPRAA Membership Mtg
Wed
IHOP 5749 Stetson Hills
Bvd
- 10 Meter Net
Every Thursday 7:00 pm
28.290 MHz—USB

Inside this issue:

Officers	2
Online Resources	
Monthly Activities	
Meeting Topics	3
Club Station	
Ø-Beat	
Minutes: Board	4
Minutes: Membership	5
Code of Conduct	6
Dayton VE testing	
Rocky Mtn Convent.	7
Megafest w/ WIAW/O	
2 mtr SSB (cont.)	8
PPARES (cont. pg. 1)	
General Class	
Log Periodic Antenna	9
VE Testing Information	10
Help for new Hams	11
Application	12
Scholarship Fund	



Volume 64, Issue 5

May 2014

Pikes Peak ARES (Region 2 District 2 Colorado ARES)

Pikes Peak ARES (Region 2 District 2, Colorado ARES):

SKYWARN

SKYWARN training was conducted on 5 April. Additional dates and online training may be found at <http://www.crh.noaa.gov/pub/?n=wcm/talks.php>. SKYWARN weather spotters (not chasers) are crucial for the National Weather Service, which is why the NWS provides this training. There are at least 5 ham operators at NWS Pueblo and the mid-day weather net begins on May 15 on the 146.970/ negative/100 repeater.

A few reasons why this program is critical:

⇒ Weather radar does not see all the way down to the ground -- they need eyes to observe the last 1000-2000 ft;

⇒ The radar can tell if

conditions are favorable for a tornado, but they cannot tell if a funnel cloud has formed or is touching the ground;

⇒ The radar has limited ability to give precipitation rates. You DO NOT have to be a member of ARES to participate in S K Y W A R N : skywarn.org/.

One of the items briefed in SKYWARN training was the ongoing flood threat.

Waldo Canyon

There has been a ton of mitigation work done in the Waldo Canyon burn scar and lower areas and the soil is probably no longer hydrophobic, but the danger still persists.

Black Forest

Flooding in the Black Forest area, though less of an issue

than the Waldo Canyon burn scar, is still something to keep an eye on. The Turn Around, Don't Drown program will probably get repeated a lot.

Special Events

So far ARES has 10 special events scheduled, beginning with the Falcon 50 ultra-marathon on 3 May. Sign-ups are located at 216.161.57.107/ARESPSE/Default.aspx.

If you are interested in ARES, these are a great way to get some experience and for some of the bigger events.

If an event has met its required number of operators, you can still sign-up -- those numbers are minimums. You can be paired with a more experienced operator or one with specific equipment if you don't have a particular item. Generally with a

Continued—Page 8

Megafest—Getting Psyched Up!!

Buy, Sell, Trade.

Yes it is about Megafest time of year again. So get ready for a great time, get a table, look for those Megafest special deals.

\$15.00 per table through July 20th.

Raffle Tickets:

\$1.00 per single ticket
\$5.00 for 6 tickets
\$10.00 for 15 tickets
\$20.00 for 40 tickets!

WOW!

Raffle Prizes:

Elecraft KX-3
ICOM ID-51A w/program kit
Kenwood TM-71A w/ prog. Kit
RigExpert AA-54
Tigertronics Signal Link USB
Butternut HF9V

PPRAA Officers and Board of Directors



PPRAA Board of Directors consists of four elected officers, seven board members, as well the past president (time limit dependent). The Ø-Beat editor is a board appointed position and is also a member of the board.

Officers include:

- ⇒ President
- ⇒ Vice-President
- ⇒ Secretary
- ⇒ Treasurer

To send board member's email, browse to the officers section of our website: <http://ppraa.org/about-ppraa/officers>

President	Michael Derbort	KCØELG
Vice-President	Jim Bishop	KDØKQL
Secretary	John Wishart	NGØI
Treasurer	Pam Scott	WØPRS
Board Member	Doug Nielsen	N7LEM
Board Member	Tom Brereton	WØTOM
Board Member	Jim Rader	KDØNQM
Board Member	Diana Nordstrom	KCØNPP
Board Member	Jim Harris	WØEM
Board Member	Virgil Yost	NØXRS
Board Member	Chris Schroeder	KDØUQI
Ø-Beat Editor	Dan Scott	WØRO

“The PPRAA website is the cornerstone for club related information...”

PPRAA Website

<http://ppraa.org>

The PPRAA website is the cornerstone for club related information, events, and technical information.

In addition you can register, pay dues, and submit donations. Donations to the PPRAA college scholarship fund are managed by FAR Scholarship Committee .

Facebook / Google+

Follow activities as they unfold, or get reminders of upcoming events.

Links to both Facebook and Google+ social media sites can be found on the PPRAA.org.

Or from each social media site search on: Pikes Peak Radio Amateur Association

PPRAA Forums

The PPRAA forums are intended to allow users to exchange of ideas, ask and answer amateur radio related questions, and plan/discuss upcoming events.

Check it out and register at: PPRAA.Forumotion.net



Monthly Activities

Membership Meeting

Held the 2nd Wednesday of the month starting at 7:00.

IHOP
5749 Stetson Hills Blvd
(Just west of Powers Blvd)

Next meeting is

14 May 7 pm

NOTE: Many show up at 6 pm for kibitzing and telling amazingly tall tales.

Board Meeting

Held the Monday preceding the general membership meeting.

Daniel's Taco Shop
12 May 6:30pm—8:00pm
6817 Space Village Ave
(Just outside the north gate of Peterson AFB)
Board Meetings are open to all members.

The May meeting is on the 12th.

Ham Breakfast

Location changes monthly
3 May— 8:00AM-9:30AM
Rudy's Little Hideaway
925 S 8th Street

10 Meter Net

Every Thursday at 7pm
Starts on 28.390 USB.
May move to other bands within the technician class allocations

Meeting Presentation Topics

April Meeting

Jamboree on the Air

Presented by Gordon Dixon, WØRGD with trivial help from Dan Scott, WØRO.

The presentation is posted in the Download section of the PPRAA.org web site. The Download section is restricted to registered PPRAA members.



May 14th Meeting

Storm season is just around the corner, so start thinking about that new piece of tech that you need to make this observation a success.

Join Christopher Schroeder will unveil and demonstrate the improved STING (Stationary Interactive Gear) project which will be available to you.

June 11th Meeting

The topic of the May meeting is "The Big Antenna Project"

Please drop by the IHOP meeting location to find out about this exciting project.



PPRAA Club Station

We will have a work party heading to the PPRAA club station location Saturday May 3rd at 10:00 AM.

Items to size, design or get installed:

1. Coax/ground plate. This the common, grounded, entry point for all coax.
2. Subfloor (i.e. from under the trailer) blocking any

opening with steel wool then foam sealer

3. Carpet installation.
4. Electrical wiring and conduit
5. Door locks
6. Fence gate

The idea is to make short achievable objectives for each work day.

If you have an expertise,

experience, or have only heard that one or more of the things in the list exist, place drop by to help out.

Car pooling may be available by attending the Ham Breakfast. Feel free to drop by during breakfast. We look forward to seeing you there!

"Coax/Ground plate. This is the common, grounded, entry point for all coax"

Zero Beat

We can always use more articles from PPRAA club members. The articles do not have to be long, but if you provide a longer article it may be included in a single issue or span 2 or more issues.

If you have questions about what to publish, want me to edit it prior to deciding if you want to have it included, please write to me at:

zerobeat@ppraa.org

When you write, please include "0-Beat" somewhere in the description, ideally the first word. This will make it more easily identified for needing attention.

I hope you are enjoying the 0-Beat. It is a lot of work getting it together, but enjoyable at the same time.

Of course, the more submissions I get, the less work it becomes. So, keep those

articles coming!

Please submit you articles 2 to 3 weeks prior to the end of the month.

Thanks,
Dan, WØRO
0-Beat Editor



Help! Keep the press going.

Submit articles to you 0-Beat editor:
zerobeat@ppraa.org



PPRAA Board Meeting Minutes

Present: Michael Derbort, Pam & Dan Scott, Virgil Yost, Jim Bishop, Diana Nordstrom, Jim Rader, Jim Harris, Chris Schroeder, Doug Nielsen, John Wishart, John Bloodgood

President Michael Derbort called the PPRAA board meeting to order at 6:42 PM at Daniel's Taco Shop Restaurant. March board meeting minutes were approved as published.

2014 Goals & Objectives - no change in G&O

1. New Leadership

2. Financials

- Members - 20 more paying members is our goal (150 total)
- We have 2 new members from last meeting.

- Megafest - \$2500 profit is our goal.

3. Club Station - goal: at least one operating position and the building completed.

4. Special Events

- Special events station for the 100th anniversary of ARRL at the Megafest operating as WIAW/0. We would also like to have another special events station on July 12-13.

- 75 yrs of service for our club
- Scouting event - meet at 6PM at May regular meeting to do advance planning.

Committee Reports

Treasurer's Report - Pam stated we have a bank balance of \$9062.62 as of 31 March 2014.

Building Committee - will meet May 3 10AM at club station in Ellicott. Dan has action item list.

Station Building - will be working on trailer items first until land use agreement is signed.

Land Use Agreement - not yet signed.

Megafest 2014 - Pam noted that the early bird table rates will be ending April 20. John will send out a reminder to our vendor before this.

Electronic Media - Doug - we have received a lot of "Likes" on Facebook.

Asset Committee - Virgil said that we need storage to put items that we collect. Chris mentioned he may have a source for the metal storage "PODS"-type boxes.

Scholarship Fund

Pam reported that we have \$427.69 donated for this year as of today.

Zero Beat—Thanks to Dan for the Zero Beat issues. Dan noted that he still needs short articles of interest from members. Please submit articles and pictures to Dan at zerobeat@ppraa.org. Deadline this month is the 18th of May.

ARES—Jim Bishop reported on several local events that need ARES volunteer support. See local ARES website for info or to volunteer: www.ppares.org. Correct IP address is <http://216.161.57.107/ARESPSE> is the link to the volunteer web page.

Technical Education—Mike Anderson WV7T is still conducting tutoring for Tech class license exam. We would also like to start a General license class. Motion was made/seconded to purchase five license exam books @\$21 each for the instructors to have. Passed. We are recruiting instructors for the various sections of the General course.

Unfinished Business

El Paso County Radio Club Membership - no activity.

Ham Breakfast - Rudy's Little Hideaway, 925 S. 8th St. on Saturday, May 3, 8AM (prior to the station work party).

Next Board Meeting: Monday, 12 May 2014, at Daniel's Taco Shop.

Around The Table

Jim Harris - V7ARC meeting Sat April 12 at 9AM.(Village Seven Amateur Radio Club)

John Bloodgood KD0SFY - CO House Bill 14-1216 requires markings on towers 50' to 200' tall. It may also include a PRB-1 clause. Affects unincorporated areas only.

Doug - Will be attending CCARC meeting in Windsor on April 19. Still looking for a Frequency Coordinator person. New member is Tom O'Hare.

Dan - still working on getting participants for the WIAW/0 special event set up.

Pam - noted that a newly licensed ham from Yoder had received a misspelled certificate for a club membership with no name filled in. Need to also include membership applications with the certificates.

Virgil - thanks to Gordon and Randy for having a table at the breakfasts.

Jim Rader - commented on the low turnout at the recent ham breakfasts. Moved/seconded to not have future ham breakfasts at Daniel's Taco Shop. Passed. Replaced in the rotation with The Dive in Old Colorado City at 31st St & Colorado Avenue.

Chris - will be doing a program in May on a new robotic weather spotter station.

Meeting was adjourned at 8:16PM.

Respectfully Submitted,
John Wishart NG0I
Secretary
13 April 2014

General Membership Meeting Minutes

President Michael Derbort called the PPRAA general meeting to order at 7:00 PM at IHOP Restaurant at 5749 Stetson Hills Blvd., Colorado Springs, CO.

Silent Keys – Matt's father in Tribune, KS, KOMPS?. Also WD0WD4? (Sorry, but did not get correct call signs or names for either one.)

Minutes were approved as published.

ARRL Rocky Mountain Convention in WY. This event has been cancelled. It has been replaced by the Albuquerque, NM event on Aug 8-10.

CO State House bill 14-1216 John Bloodgood commented on this. The bill places restrictions on towers in unincorporated rural areas 50-200ft. Requires marking on towers. Trying to make sure that AR interests are represented in the bill. PRB-I language is not going to be included. It still needs clarification of language/terminology in some places.

CCARC

Next meeting is April 19.

WIAW/O Participation

Requesting people to sign up to be able to participate in this event. Send email to Dan Scott at WIAW@ppraa.org to sign up.

2014 Goals and Objectives - no changes

New leadership

Financials - Add 20 new paying members, make \$2500 on Megafest

Club station - at least one operating position permanently online, trailer completed

Special Events

- 75 years of service by our club - July 12-13 at our club station

- Scouting event - date is TBD

Committee Reports

Treasurer's Report - Pam stated we had \$9,062.62 in our bank accounts as of 31 March 2014.

Asset Committee - Virgil - updated asset list has been sent out to the board & membership.

Club Station update - Dan has set up a workday 10:00AM Saturday May 3. You can get on the station work email list by sending a request to trailer@ppraa.org. Action item list is available.

Electronic Media - Doug - received several new Facebook "Likes."

Technical Education - Mike WV7T is still tutoring for Tech class licenses. We are in the process of setting up a General license class. Dan has purchased five copies of the new Stu Turner W0STU General class license book that are available for use by instructors. We are seeking instructors for the various sections of the course.

Zero Beat - Deadline for article submissions is April 15. He is always in need of articles, short or long ones.

ARES Update - Jim Bishop reported on local ARES events and upcoming activities that need volunteers. ARES website is www.ppara.org. The correct & working volunteer link is <http://216.161.57.107/ARESPSE>. John Bloodgood also commented on the availability of free ARES info from ARRL. Skywarn training is April 28 at the Grace Church in Falcon, 6:30PM.

Scholarship Fund

Please donate to our fund for the 2014 school year. \$427.69 has been donated so far this year. Donations can be made via PayPal on the PPRAA website (ppraa.org).

Member Challenge: Jim Bishop will match your Scholarship Fund donation up to \$300 [total] until July 4.

El Paso County Radio Club

Consolidated Membership

No new progress at this time.

Megafest 2014—Saturday, July 26th at Lewis Palmer High School, Monument, CO. Please consider joining the planning committee. Raffle tickets may be sold/purchased now. If you will be attending other club meetings or activities, please pick up and hand out some flyers & sell some raffle tickets to attendees. Will have two operating stations at the event. Early bird table prices end on April 20.

Field Day

It will be at our club station in Ellicott on June 28-29.

Volunteer Examiner (VE) Report

VE session is on the even months, this Saturday, April 12, at 9AM at Colorado Technical University. Our club Members are encouraged to get qualified to be a Volunteer Examiner. It's an open book exam, with the Volunteer Examiner Manual available as a PDF for study and reference on the arrrl.org website.

Program

Gordon Dixon and Dan Scott gave a presentation on participation in the annual amateur radio Scouting event,

Jamboree On The Air (JOTA), which is held on the 3rd weekend in October.

Upcoming Events / Notices

Ham Breakfast - Rudy's Little Hideaway, 925 S. 8th St. on Saturday, May 3, 8AM (prior to the station work party).

Thursday Night Net: On the air every Thursday, 7PM, at 28.390 MHz (USB, 10 meter band, vertically polarized).

Next Meeting: 7:00PM, 14 May 2014, IHOP Restaurant, Stetson Hills Blvd. & Powers.

Next Board Meeting: 7:00PM, 12 May 2014, Daniel's Taco Shop.

Respectfully Submitted,

John Wishart NG0I

Secretary

13 April 2014

**"Member
Challenge: Jim
Bishop will
match your
Scholarship
Fund donation
up to \$300
[total] until
July-4.**



***“Listen, Listen
again and after
waiting, listen
some more!”***

The Amateur Radio Operator Code of Conduct

Jim Bishop

KD0KQL

Due to many complaints from around the world of poor operating conduct by amateur radio operators in both local contacts and DX contacts, there have been many attempts to put this poor behavior to an end. One popular idea has been a “Code of Conduct” for amateur operators to try to improve the situation. Many amateurs have written their own versions of the “Code” to suit their own circumstances and to address the things that they have witnessed over the span of many years of operation on the air.

I will select a couple of the more significant rules from a collection of codes that I have been reading lately. Even Hiram Percy Maxim was irritated by the poor operating practices of the amateurs of his day and there weren’t that many on the air and DX wasn’t much of an issue. It shows that there are always a few who make it hard for the rest of us by being obnoxious.

I’ll start with what I think is one of the most flagrant violations of good conduct that continually shows up when

certain individuals hit the power switch on their radio and send their voice out over the air.

Listen, listen again and after waiting, listen some more!

Few things are more irritating than to be in the middle of a good QSO when someone jumps in and starts calling “CQ CQ CQ” right on top of your conversation with an old or new friend on the air. It makes sense that if you can hear him, he can probably hear you too (if he was listening).

This is like being at a get-together with friends and having someone burst through the door and start yelling at no one in particular while interrupting all the ongoing conversations that are taking place. How would you react if someone did this to you? What reaction would you expect of others if you were the one doing it to them?

For anyone who has been on the air for any length of time, you have most likely experienced this at least a few times. More importantly, have you ever been guilty of this

behavior? We all hope not. We all know that it is polite to ask first. A simple “is the frequency in use” repeated at a proper interval is the proper approach to take. You never know if one or several of the operators that are on your selected frequency may be a great contact for you unless you ask first. You may get a new country, state, county or grid out of it. You may be the same good contact for one or several of those who you escaped rudely butting in on by using proper techniques. Give it a try. It works. If you continue to ignore common courtesy, sooner or later the word will get out and you may start to get ignored on the air. No one wants to talk to a jerk!

I would like to thank the following for their hard work in researching the problem and writing their own versions of the “Code of Conduct” for amateur radio operators.

Attributes:

dx-code.org
Randy Johnson W6SJ
Paul M. Segal, W9EEA – (1926)

73
Jim Bishop
KD0KQL



Dayton Hamvention Exams –By Dave Sloan - NØEOP

Hello everyone,

We have PRE-REGISTRATION available this year. It will save you a lot of time by not having to register at the EXAM sessions. The form for pre-registration is located at hamvention.org then click on the EXAMS link and

scroll down for the link to the form.

PLEASE PASS THIS INFORMATION AROUND AS MUCH AS YOU CAN! The more pre-registration I can get will make it just that much easier at the show.

Thanks,
Dave Sloan NØEOP
Chairman EXAMS
Dayton Hamvention

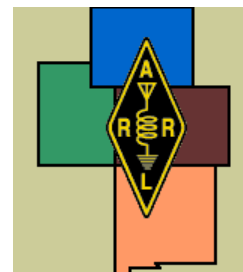
The 2014 ARRL Rocky Mountain Division Convention Changes Venue

The 2014 ARRL Rocky Mountain Division Convention will be held August 8-10 in Albuquerque, New Mexico in conjunction with the annual Albuquerque Duke City Hamfest

What to expect:

- New/used ham equipment sales, manufacturers and vendors
- Outdoor tailgating
- technical and non-technical forums
- banquet meals with notable speakers
- special event station, competitions
- QSL card checking
- amateur radio license exams
- numerous prizes
- ARRL forum, midnight Wouff Hong ceremony
- satellite QSO demonstrations
- near-space balloon launch
- specialized modes demos
- and much more.

For more information browse to:
dukecityhamfest.org



PPRAA Megafest with W1AW/Ø Special Event

Metafest is just around the corner and is being held July 26th.

The Rocky Mountain Hams club will be bringing both their communications vehicles. This trailer, which is definitely something not to be missed. They will also be bringing the smaller communications truck.

The ARRL Centennial QSO Party will be operating from the trailer as W1AW/Ø. This

will give you the opportunity to operate as the sought after station.

If you are looking to help with Megafest, we will be setting up the gym, Friday afternoon from 4:00 PM until 6:00 PM.

Another way to help is to ask businesses if they can donate door prizes. Because we are a 501(c)(3) organization, they will receive a donation letter for

their tax deductible contribution, and the Megafest will continue to have a lot of excellent prizes for the hourly door prize giveaways.

For more information about the Megafest please browse to our site at:

ppraa.org/megafest

***“Megafest is
just around the
corner...”***

30 Years ago—May 1984

- ◆ Jake NØCYR reports the 146.97 is now used for the ARES nets on Wednesdays at 7:00.
- ◆ The April meeting had 46 members and guests.
- ◆ Herb Moore of the NWS presented the program on weather patterns in the area.
- ◆ Rosie WAØMNL and Oak KØROL will run a club hospitality booth at the convention coming up.
- ◆ The August 12 picnic is set for the Black Forest pavilion.
- ◆ KØTER Mike will make a list of club equipment and determine what to do with the property.
- ◆ The Field Day will be at the Rampart Range Road with four stations. Jake NØCYR will cook breakfast. Mike KØTER proposed the club get a small trailer for club functions.
- ◆ The swapfest winners were James Putnam of COS (19- in color TV), Charlie Biggs KCØTI (the scanner), and Art KCØVL of Nathrop, CO (the \$100 cash award).
- ◆ Convention this month on May 25 through May 27.





Horizontal 2-meter beam

Getting Started on 2-Meter SSB (Continued from April)

When and Where to Operate
The SSB portion of the band runs from 144.100 MHz to 144.275 MHz and Upper Sideband (USB) is used. The 2M SSB calling frequency is 144.200 MHz, so that is the first place to look for activity or to call CQ. One of the realities of 2M SSB operation is that many times, no one is on the air. There is just not that much activity out there, compared to 2M FM. Some amateurs get discouraged, turn off the radio and miss the thrill of working distant stations during a band opening.

To get started on 2M SSB, the trick is to get on the air at times when you know there will be activity--- during VHF nets and VHF contests.

Here in Colorado, the local Rocky Mountain VHF Plus net is on Monday night at 8:00 PM local time on 144.220 MHz (USB). This net is centered in the Denver area but VHF enthusiasts check in from all around Colorado. It is very common to have stations check in from the bordering states of Wyoming, Nebraska, Kansas, New Mexico or even

Oklahoma. More information on the net and other VHF activities can be found at www.rmvhf.org

There is also a 2M SSB net associated with the Amateur Radio Emergency Service (ARES) which meets at 7:00 PM local time.

Continued June 0-Beat

Bob, KØNR, is a long time member of PPRAA. Bob has many accomplishments in Amateur radio.

See: www.k0nr.com



Pikes Peak ARES (Region 2 District 2 Colorado ARES) cont.

dual band handheld and a mag-mount antenna, you are good to go. Background checks are not required for most special events. You do need a good understanding of how to operate on a directed net, which just so happens we hold every Tuesday evening at 7 PM on the 146.970 repeater. Other ARES voice nets are Sunday at 8 AM on 3.810 LSB, Sunday at 8 PM on the Colorado Connection repeaters (usually 145.130/

negative/123 or 145.310/ negative/123, depending on your area), and Monday at 7 PM on 144.220 USB.

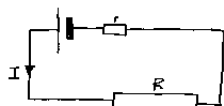
Materials request:

The Public Information Officer is trying to gather materials for exhibits and displays. If you are ordering stuff from the ARRL store, they have several brochures/handouts that they will send for free with your order. Look in <http://www.arrl.org/shop/Brochures->

Handouts-and-Exhibit-Supplies/

. Of particular interest are: Amateur Radio Emergency Service leaflet, Serving your Community flyer, When All Else Fails brochure, and We Do That! Technology brochure. So add some to your cart and give them to the PIO at the next club meeting.

Any questions can be directed to John Bloodgood, KD0SFY at either pio@ppares.net or kd0sfy@arrl.net.



General Class—Look for Help!!!!

PPRAA is looking for people to help with a General Class licensing course.

If you are interesting it helping create the course, or teach a chapter or a small section, please write to me at w0ro.dan@gmail.com.

The text will be from HamRadioSchool.com General

Licensing Course.

The course author, Stu Turner, WØSTU, has volunteered helping and teaching a couple of the sections.

We have books available for you to check-out so you can evaluate if you want to help with teaching the class.

"This book really teaches radio and when you "get it" you don't have to rely on mind numbing memorization."

Don't just memorize!

Really get it!

(G9D06) Log Periodic Antenna—HamRadioSchoolOnline.com

This article was republished from the HamRadioSchoolOnline.com. You will find many informative articles.

G9D06 from the General License Course Section 5.2, Directional Antennas

Q. Which of the following is an advantage of a log periodic antenna?

- A. Wide bandwidth
- B. Higher gain per element than a Yagi antenna
- C. Harmonic suppression
- D. Polarization diversity

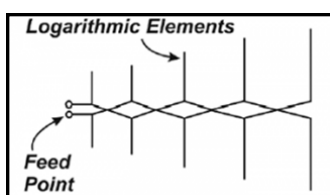


The log periodic antenna is a specialized antenna with unique advantages. Let's take a quick look at the general construction of a log periodic and then consider the question response options.

The log periodic looks much like a multi-element Yagi antenna in that it has parallel elements mounted along a boom, with shorter elements in the forward pointing direction and longer element to the aft. However, the log periodic antenna's design and performance is actually very different from that of the Yagi.

While the Yagi antenna will have reflector and director parasitic elements properly spaced and cut to length for directional gain, each element of the log periodic antenna is an active (driven) dipole element. This set of variably cut

dipoles is driven from a single feed-point at the front end of the log periodic boom, and the dipoles are alternatively fed with opposite connection polarity. The general construction and dipole element connectivity is depicted in the diagram below.



The log periodic antenna is an array of active dipoles of alternating polarity, fed from a single forward point. Dipole element lengths and spacing increases logarithmically from front to aft along the boom.

Further, these dipole elements are cut in length to increase logarithmically from front to aft along the boom, and the spacing between elements along the boom also increases logarithmically front to aft. Hence, the name. You may recognize this arrangement as a popular one for VHF and UHF television antennas.

This unique arrangement results in the activation of a particular dipole in the periodic array depending upon the feeding frequency. Lower frequencies will be radiated by the longer elements near the aft of the boom, while higher frequencies will activate the shorter dipoles near the front of the boom.

You may have already deduced the correct answer based upon the construction design and

behavior of the log periodic. From the bottom up in response options, what is the main advantage of the log periodic antenna?

D. Polarity diversity: No. Polarity is determined by the orientation of the electric field component of the waveform, and the electric field orientation is determined by the radiating element orientation. The log periodic is just like any dipole in this regard, usually operated either horizontally or vertically polarized only.

C. Harmonic suppression: No. Log periodic antenna may promote some increase in harmonic response, but they do not suppress harmonics with any special advantage.

B. Higher gain per element than a Yagi antenna: While the log periodic does provide moderate directional gain in the forward direction, it is typically not as great as that offered by a Yagi of similarly numbered elements.

A. Wide bandwidth: Yes! (If only by deduction.) By nature of its construction with multiple dipoles cut to length across a wide range of frequencies, the log periodic will offer very wide bandwidth performance. A single log periodic antenna can operate well across several amateur bands, providing good matching impedance and low SWR. It is an excellent choice for a single-feed-point, multi-band antenna, and the moderate directionality is a nice fringe benefit!



Log Periodic Antenna

“The log periodic antenna is a specialized antenna with unique advantages.”



Elk antenna's 2m/440cm Log Periodic Antenna

VE Testing Colorado Spring (PPRAA)

Pikes Peak Radio Amateur
Association (PPRAA)

When:
Feb, Apr, Jun, Aug, Oct, Dec
2nd Saturday at 9 AM

Location:
Colorado Technical University
(CTU)
4435 North Chestnut
Colorado Springs, CO 80907

Directions:
<http://ppraa.org/ve-testing>
or contact:
Dan Martin
VE@PPRAA.org



VE Testing Woodland Park (MARC)

MOUNTAIN AMATEUR
RADIO CLUB (MARC)

When:
Jan, Mar, May, Jul, Sep, Nov
1st Saturday at 10 AM

Location:
Woodland Park
Woodland Park Library-
Community Meeting RM
218 East Midland Avenue

Directions:
<http://www.nx0g.org/ve.html>
or contact
Wes Wilson (KØHBZ)
k0hbz@arrl.net
Call (719) 687-8758



Applicants will need the following items:

1. A valid PHOTO ID, driver's license preferred (if you do not have a valid photo ID, please call for alternative identification requirements).
2. Your FRN or SOCIAL SECURITY NUMBER (now required – this includes children).
3. Your CURRENT ORIGINAL amateur radio license (if any) and a PHOTOCOPY for the VE Team to keep.
4. The CURRENT ORIGINAL CSCEs you have and a PHOTOCOPY for the VE Team to keep.
5. Cash, Check or Money Order for \$15 (standard ARRL VE Fee). Checks and money orders should be made out to either PPRAA or MARC (site dependent). This covers all exams you wish to take at this VE session.

NOTE: PPRAA and MARC VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams.

PPRAA – Colorado Springs testing only:

Anyone passing their Technician Class examination at a PPRAA test session will receive a free year's membership to the Pikes Peak Radio Amateur Association

Help for New Hams—By Dan Romanchik, KB6NU

In a box of stuff recently donated to WA2HOM, our amateur radio station at the Ann Arbor Hands-On Museum, there was a book WIFB's Help for New Hams by Doug DeMaw, WIFB. This book hits on just about all the topics that a new ham in the late 1980s would want to know about, and WIFB does a great job of walking the new ham through these topics.

Of course, being 25 years old, some of it, is out-of-date, and it doesn't cover some questions that a new ham today would ask. For example, there's nothing in this book about digital modes or using a computer in the shack.

So, I'm thinking of writing my own Help for New Hams. Mine would probably be a little less HF-centric and include advice on joining clubs and how to use a computer in the shack. I am also thinking that maybe I should write two separate versions: an HF version and a VHF version.

At any rate, I've listed the chapters of the WIFB version below. If you have any comments about what I should include in my version, I'd love to hear from you.

- ◇ The Newly Licensed Amateur. This chapter talks mainly about how to choose equipment, but also covers some of the modes that amateur radio operators can use.
- ◇ Your New Equipment—Getting Acquainted. This chapter discusses how to use the features of

modern transceivers, amplifiers, and antenna tuners. It also talks a little bit about antennas and SWR.

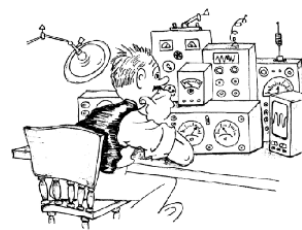
- ◇ Constructing and Using Antennas. This chapter goes into greater depth on antennas. It discusses the different types of antennas, how to feed them, and how to bring feedlines into the shack.
- ◇ Station Layout and Safety. This chapter covers the practical aspects of setting up an amateur radio station, including desk and chair selection and station wiring.
- ◇ TVI and RFI—Strange Bedfellows. TVI and RFI are less of a problem these days than back in the 80s, but it's still something new hams need to know about.
- ◇ Operating Problems and Fears. This chapter discusses some of the operating problems new hams face, including honesty in signal reporting, how to operate split and how to work DX.
- ◇ On-the-Air Conduct and Procedures. This chapter discusses more operating procedures, including calling CQ, how to operate via a repeater, and how to ID.
- ◇ Station Accessories—What to Buy? This chapter discusses a variety of station accessories including keys and keyers,

microphones, antenna tuners, phone patches (!), and antenna switches.

- ◇ DX and Contest Operating. This chapter not only discusses operating procedures, but how certain equipment features will help the new ham work more DX and score better in contests.
- ◇ Logging, QSL Cards, and Record Keeping. This chapter discusses why it is important to keep logs and how to QSL.
- ◇ Obtaining Accurate Information. This chapter is basically an ad for the ARRL, counseling the new ham to join the ARRL and buy ARRL books.

I am especially interested in hearing from new hams about these topics. What about amateur radio confused you at first? What information would have helped you have more fun with amateur radio? What do you know now that you wish you had known when you got started?

When he's not writing about amateur radio, Dan, KB6NU enjoys Elmering new hams and working CW on the HF bands. For more information about his operating activities and his "No-Nonsense" series of amateur radio license study guides, go to KB6NU.Com or e-mail cwgeek@kb6nu.com.



"I'm thinking of writing my own Help for New Hams. Mine would probably be a little less HF-centric and ..."

**PIKES PEAK RADIO
AMATEUR
ASSOCIATION**

Send membership application to:

Pikes Peak Radio Amateur
Association, Inc.
P.O. Box 16521
Colorado Springs, CO 80935

General Questions:
ppraa@ppraa.org

ØBeat:
zerobeat@ppraa.org



ppraa.org

Become Radio Active - Get On the Air

Membership Application:

Date: ____ / ____ / ____ **New Membership: Yes / No**

Name: _____

Address: _____

City/State/Zip: _____

Call: _____ **Class:** ____ **Phone # (____)** _____

Email: _____

Are you a ARRL member: Yes / No

Additional Family Members:

Name1: _____ **Call:** _____ **Class:** ____ **ARRL Member: Yes / No**

Name2: _____ **Call:** _____ **Class:** ____ **ARRL Member: Yes / No**

Name3: _____ **Call:** _____ **Class:** ____ **ARRL Member: Yes / No**

____ \$15.00 Full Member

____ \$10.00 Full Member over 65

____ \$18.00 Family Membership

____ \$12.00 Family Membership over 65

\$ ____ . ____ **Membership Amount**

\$ ____ . ____ **Scholarship Fund Donation**

\$ ____ . ____ **PPRAA General Fund Donation**

\$ ____ . ____ **Total**

PPRAA Scholarship Fund

The PPRAA strives to provide educational and recreational activities for its members intended to further their knowledge in the art of radio communications. The PPRAA encourages its members to participate in public service communications, civil defense, charitable fund drives and other activities for which amateur radio is particularly adapted. In this spirit of public service the PPRAA embarked over three years ago on creating a scholarship fund to promote undergraduate students to excel in the Engineering and Sciences. The fund will award one \$1,000 scholarship per year and be open to any student who is pursuing an undergraduate degree in either Engineering (Electrical, Civil, Mechanical, Chemical, Aeronautical) or the



**Donate to the PPRAA
Scholarship Fund**

hard sciences (Physics, Chemistry, Computer Science) at any accredited university with an emphasis on Colorado institutions. The scholarship

program will be managed by the Foundation for Amateur Radio located in Washington, DC and with help from Amateur Radio enthusiasts such as you; it will be ready for the 2015 school year.

Anonymous donations may be made directly to the scholarship fund at:

FAR Scholarship Committee
P.O. Box 911
Columbia, MD 21044

Checks to: PPRAA Scholarship

Online, secure, donations can be made at:

ppraa.org/donations.

Consider adding a donation to your membership when you renew online.